



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/847,072	05/02/2001	Kaushal Thakker	50001.2062	6976

27045 7590 11/03/2003

ERICSSON INC.
6300 LEGACY DRIVE
M/S EVW2-C-2
PLANO, TX 75024

EXAMINER

EWART, JAMES D

ART UNIT	PAPER NUMBER
2683	6

DATE MAILED: 11/03/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

AK

Q.R

Office Action Summary	Application No.		Applicant(s)	
	09/847,072		THAKKER, KAUSHAL	
	Examiner		Art Unit	
	James D Ewart		2683	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on _____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
 If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
 a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: _____ |

Drawings

1. The drawings are objected to because throughout the specification, the IP Network is referred to label 14 and the drawing indicates label 16. The media and signal gateway is referred to label 16 and in the drawing it is label 14. A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

2. The Abis Gateway (AGW) 36 is shown as AGN in the drawing. A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Claim Objections

3. Claim 8 is objected to because of the following informalities: the very last part of claim 8 reads "to provide said mobile terminals" should be something like "to provide wireless service to said mobile terminals". Appropriate correction is required.

4. Claim 1 is objected to because of the following informalities: claim 1 suggests "IP network providing an air interface to the wireless network" and the specification indicates the air interface is to the mobile users. The limitation should be something like "IP network providing an air interface to mobile terminals of the wireless network". Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless – (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 1 – 16 and 18 - 22 are rejected under 35 U.S.C. 102(e) as being anticipated by Gremmelmaier (US Patent No. 6,308,267).

Referring to claim 1, Gremmelmaier teaches a method of providing services to a mobile terminal within an area (Figure 1; 109) serviced by both a wireless network and an Internet Protocol (IP) network (Figure 1), comprising the steps of: the IP network providing an air interface to the wireless network (Figure 1; 109); a mobile terminal registering with the IP network via the air interface (Column 3, Lines 65-67 and Figure 1) thereby allowing the IP network to share the load of servicing the mobile terminal (Figure 1); a mobile terminal requesting service (Column 1, Lines 54-62); and the IP network providing service to the mobile terminal (Figure 1).

Referring to claim 2, Gremmelmaier further teaches comprising the step of providing the wireless terminal with location-specific service (Column 1, Lines 11-13, 35-45). Examiner equates location specific services with data or cell phone service.

Referring to claim 3, Gremmelmaier further teaches the step of the mobile terminal performing a location update with the IP network (Column 4, Lines 46-52 and Figure 3).

Referring to claim 4, Gremmelmaier further teaches the step of the IP network registering the mobile terminal with the wireless network (Column 2, Lines 5-12)

Referring to claim 5, Gremmelmaier further teaches the step of the IP network registering the mobile terminal in a Visitor Location Register (VLR) (Column 4, Lines 30-33).

Referring to claim 6, Gremmelmaier further teaches the step of the IP network interfacing with the wireless terminal in emulation of the wireless network (Column 3, Lines 19-21 and Figure 1; 105).

Referring to claim 7, Gremmelmaier further teaches the step of the IP network interfacing with the wireless network in emulation of a Mobile Switching Center (MSC) (Figure 1). The network coupling unit is not shown to be connected to the BTS of the PLMN and Examiner equates network coupling unit with an MSC.

Referring to claim 8, Gremmelmaier teaches a telecommunications system providing load sharing between a wireless Public Land Mobile Network (PLMN) and an Internet Protocol (IP) network comprising (Figure 1): a Public Land Mobile Network (PLMN) configured to provide wireless service to mobile terminals throughout a specified service area (Figure 1; 107); an Internet Protocol network adapted to provide service within a shared service area of said

specified service area (Column 3, Lines 23-26 and Figure 1; 109); and an interface for operably coupling the Internet Protocol (IP) network to the the PLMN (Figure 1; 109); wherein said IP network is configured to detect service requests from mobile terminals of the PLMN and wherein said IP network is further configured to provide said mobile terminals (Column 1, Lines 54-62, Column 3, Lines 23-30 and Figure 1; 105).

Referring to claim 9, Gremmelmaier further teaches wherein the IP network utilizes H.323 protocol (Figure 5; 403).

Referring to claim 10, Gremmelmaier further teaches wherein the PLMN is a Global System for Mobile (GSM) network (Column 3, Lines 20-22 and Column 4, Lines 3-4).

Referring to claim 11, Gremmelmaier further teaches wherein the IP network further comprises a Radio Base Station (RBS) configured to provide an air interface to mobile terminals of the PLMN (Column 3, Lines 19-30 and Column 4, Lines 3-11).

Referring to claim 12, Gremmelmaier further teaches wherein the IP network further comprises a Network Access Controller (NAC) (Column 2, Line 5) configured to provide the functions of a Mobile Switching Center/Visitor Location Register (Column 2, Lines 5-18) enabling registration of mobile terminals according to standard PLMN procedures (Column 3, Lines 65-67 and Column 4, Lines 3-4).

Referring to claim 13, Gremmelmaier further teaches wherein said IP network includes at least one Service Node (SN) configured to provide location specific services to mobile terminals, said location specific services related to said shared service area (Column 1, Lines 11-13, 35-45). Examiner equates location specific services with data or cell phone service.

Referring to claim 14, Gremmelmaier further teaches wherein said IP network comprises a Radio Network Server configured to provide the base station controller functions of a PLMN within said shared service area (Figure 1). The radio access network of the IP network has more than one BTS. Thus functions of a base station controller are provided.

Referring to claim 15, Gremmelmaier further teaches an Internet Protocol (IP) network supporting the provision of site specific services to mobile terminals comprising: a Radio Base Station (RBS) providing an air interface for coupling a mobile terminal of a Public Land Mobile Network (PLMN) to the IP network (Figure 1); a Network Access Controller (NAC) (Column 2, Line 5) configured to provide the functions of a Mobile Switching Center/Visitor Location Register (Column 2, Lines 5-18) thereby enabling registration of mobile terminals according to standard procedures of the PLMN (Column 3, Lines 65-67 and Column 4, Lines 3-4); and a Service Node (SN) configured to provide location specific services to said mobile terminal (Figure 1), said location specific services related to a service area shared by both said PLMN and said IP network (Figure 1; 109). Examiner equates location specific services with data or cell phone service.

Referring to claim 16, Gremmelmaier further teaches wherein the RBS further comprises a Base Station Transceiver (BTS) (Figure 1; 115).

Referring to claim 17, Gremmelmaier further teaches wherein the RBS further comprises an Abis Gateway (AGW) (Column 3, Lines 23-26 and Figure 1; 105).

Referring to claim 18, Gremmelmaier further teaches a Media and Signaling Gateway (MSGW) operably coupled to the NAC (Figure 1; 109).

Referring to claim 19, Gremmelmaier further teaches wherein the IP network supports H.323 protocol (Figure 5; 403).

Referring to claim 20, Gremmelmaier further teaches wherein the PLMN is a Global System for Mobile communication systems (GSM) network (Column 3, Lines 20-22 and Column 4, Lines 3-4).

Referring to claim 21, Gremmelmaier further teaches wherein the IP network is configured to emulate a PLMN base station compatible with the mobile terminal (Figure 1; 105).

Referring to claim 22, Gremmelmaier further teaches wherein the IP network emulates a mobile switch compatible with the PLMN (Figure 1).

Application/Control Number: 09/847,072

Art Unit: 2683

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Fjortoft et al. U.S. Patent No. 6,542,521 discloses method for improving service level selection in a communication network system.

Gupta et al. U.S. Patent No. 6,567,667 discloses domain selecting system and method.

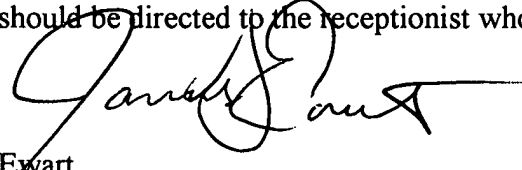
Kim U.S. Patent Publication No. 2001/0046215 discloses wire/wireless unified in-building communication method and system.

Yuan U.S. Patent No. 6,496,704 discloses systems and methods for internetworking data networks having mobility management functions.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to James D Ewart whose telephone number is (703) 305-4826. The examiner can normally be reached on M-F 7am - 4pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Trost can be reached on (703)308-5318. The fax phone numbers for the organization where this application or proceeding is assigned are (703)305-9508 for regular communications and (703)305-9508 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)305-3900.


Ewart
October 22, 2003


WILLIAM TROST
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600